

any one of an opening part or a depressed part formed in an insulating film on a substrate;

a barrier layer covering said opening part or said depressed part, said barrier layer being made of a first material;

F1
cont'd. a metal growth promoting layer formed directly on said barrier layer, said metal growth promoting layer being made of a second material that is different from said first material of said barrier layer; and

an electroconductive layer embedded in said opening part or said depressed part via said barrier layer and said metal growth promoting layer, said electroconductive layer being formed directly on said metal growth promoting layer.

F2 3. (Amended Four Times) An embedded electroconductive layer comprising:

any one of an opening part or a depressed part formed in an insulating film on a substrate;

a barrier layer covering said opening part or said depressed part;

a metal growth promoting layer formed directly on said barrier layer, said metal growth promoting layer being made of a material different from that of said barrier layer; and

F2
cont'd.
an electroconductive layer embedded in said opening part or said depressed part via said barrier layer and said metal growth promoting layer, said electroconductive layer being formed directly on said growth promoting layer;

wherein said metal growth promoting layer is a TiN layer containing oxygen at a lower concentration than said barrier layer.

5. (Three Times Amended) An embedded electroconductive layer comprising:

F3
any one of an opening part or a depressed part formed in an insulating layer on a substrate;

a ground layer containing oxygen at a high concentration in the lower part thereof and at a low concentration in the upper part thereof, and said ground layer covering the surface of said insulating film in said opening part or said depressed part; and

an electroconductive layer embedded in said opening part or said depressed part via said ground layer, said electroconductive layer being formed directly on said upper part of said ground layer.

F4
45. (New Claim) The embedded electroconductive layer according to claim 1, wherein said electroconductive layer is a Cu layer.